IN THE CLAIMS

1. (Currently Amended) A false-color reducing device, comprising:

a raw data reading processor that reads a raw data, in which a first row and a second row are arranged alternately in a vertical direction, said first row being formed by arranging a first pixel representing red (R) data and a second pixel representing green (G) data alternately in a horizontal direction, said second row being formed by arranging said second pixel and a third pixel representing blue (B) data alternately in the horizontal direction;

a first interpolation processor that performs an interpolation on said raw data to generate R plane data in which all the pixels have said R data, G plane data in which all the pixels have said G data, and B plane data in which all the pixels have said B data;

a color difference data calculation processor that calculates U data and V data, which are color difference data, regarding said first, second, and third pixels, using said R plane data, said G plane data, and said B plane data;

a second interpolation processor that calculates a mean value of said V data of four pixels adjacent to said first pixel in oblique directions, and sets ~~this~~ the mean value of said V data as replacement V data for said first pixel; and

a third interpolation processor that calculates a mean value of said U data of four pixels adjacent to said third pixel in oblique directions, and sets ~~this~~ the mean value of said U data as replacement U data for said third pixel.

2. (Currently Amended) A false-color reducing device according to claim 1, further comprising:

a fourth interpolation processor that calculates mean values of said V data and said U data of four pixels adjacent to the upper, lower, right, and left sides of said second pixel, and sets ~~these~~ the mean values of said V data and said U data as replacement ~~U~~ V data and ~~V~~ U data for said second pixel.

3. (Currently Amended) A false-color reducing device according to claim 2, wherein said fourth interpolation processor performs an interpolation, using said replacement V data and replacement U data obtained by said second and third interpolation processors.

4. (New) A method of reducing false-color, comprising:

reading raw data in which a first row and a second row are arranged alternately in a vertical direction, the first row being formed by arranging a first pixel representing red (R) data and a second pixel representing green (G) data alternately in a horizontal direction, the second row being formed by arranging the second pixel and a third pixel representing blue (B) data alternately in the horizontal direction;

performing an interpolation on the raw data to generate R plane data in which all the pixels have the R data, G plane data in which all the pixels have the G data, and B plane data in which all the pixels have the B data;

calculating U data and V data, which are color difference data regarding the first, second, and third pixels, using the R plane data, the G plane data, and the B plane data;

calculating a mean value of the V data of four pixels adjacent to the first pixel in oblique directions, and setting the mean value of the V data as replacement V data for the first pixel; and

calculating a mean value of the U data of four pixels adjacent to the third pixel in oblique directions, and setting the mean value of the U data as replacement U data for the third pixel.

5. (New) The method of reducing false-color according to claim 4, further comprising:

calculating mean values of the V data and the U data of four pixels adjacent to the upper, lower, right, and left sides of the second pixel, and setting the mean values of the V data and the U data as replacement V data and U data for the second pixel.

6. (New) The method of reducing false-color according to claim 5,

wherein the replacement V data and replacement U data are obtained by calculating the mean value of the V data of four pixels adjacent to said first pixel in oblique directions and by calculating the mean value of the U data of four pixels adjacent to said third pixel in oblique directions.

7. (New) A computer readable medium that stores a program for reducing false-color, comprising:

a raw data reading code for reading raw data in which a first row and a second row are arranged alternately in a vertical direction, the first row being formed by

arranging a first pixel representing red (R) data and a second pixel representing green (G) data alternately in a horizontal direction, the second row being formed by arranging the second pixel and a third pixel representing blue (B) data alternately in the horizontal direction;

an interpolation code for performing an interpolation on the raw data to generate R plane data in which all the pixels have the R data, G plane data in which all the pixels have the G data, and B plane data in which all the pixels have the B data;

color difference code for calculating U data and V data, which are color difference data regarding the first, second, and third pixels, using the R plane data, the G plane data, and the B plane data;

a mean V data code for calculating a mean value of the V data of four pixels adjacent to the first pixel in oblique directions, and setting the mean value of the V data as replacement V data for the first pixel; and

a mean U data code for calculating a mean value of the U data of four pixels adjacent to the third pixel in oblique directions, and setting the mean value of the U data as replacement U data for the third pixel.

8. (New) The computer readable medium according to claim 7, further comprising:

a mean V data and U data code for calculating mean values of the V data and the U data of four pixels adjacent to the upper, lower, right, and left sides of the second pixel, and setting the mean values of the V data and the U data as replacement V data and U data for the second pixel.

9. (New) The computer readable medium according to claim 8,

wherein the replacement V data and replacement U data are obtained using the mean V data code and the mean U data code.